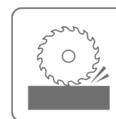


M SEALS PKV-CRD86

Unreinforced Virgin PEEK

MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Description

M Seals PKV-CRD86 material is a high-performance unreinforced virgin PEEK material. This material has excellent thermal resistance, high compressive strength, low wear properties and low creep values.

PKV-CRD86 material is commonly used for back-up rings, guide rings, wear rings, bushes, valve seat seals, scraper seals and other applications requiring excellent hydrolysis and steam resistance.

Physical Properties

Property	Test method	Unit	Typical value		
Type			SMP	SMG	EXG
Colour			Beige	Beige	Beige
Density	ISO 1183	g/cm ³	1.31	1.31	1.31
Hardness	ISO 868	Shore D	88	88	88
Tensile Strength	ISO 527-2	MPa	102	95	110
Elongation at break	ISO 527-2	%	19	10	20
Flexural strength		Mpa	164	140	-
Modulus of elasticity (Tensile)		Mpa	3670	3670	4000
Glass transition temperature *	DIN 53765	°C	+150	+150	+150
Melting temperature	DIN 53765	°C	+341	+343	+343
Service temperature short term **		°C	+300	+300	+300
Service temperature long term **		°C	-60/+250	-60/+250	-60/+250

* (Information found from public sources)

** (Individual testing in application conditions is mandatory)

SMP= Special manufacturing technique using Victrex PEEK 450PF fine powder

SMG= Special manufacturing technique using Victrex PEEK 450G granules

EXG= Extruded manufacturing technique using Victrex PEEK 450G granules

Main Characteristics

- Excellent thermal resistance
- High compressive strength
- Good sliding ability
- Good creep resistance
- Good wear properties
- Hydrolysis & steam resistance

Typical Products

- Wear strip
- Bearing rings / guide rings
- Bushes
- Valve seat seals
- Anti-Extrusion / Back-Up Rings
- Bespoke parts

Typical Applications

Due to its excellent thermal resistance, compressive strength and low creep values, this material is an excellent choice for applications using anti-extrusion/back-up rings where high temperatures and pressures may be seen.

PKV-CRD86 is commonly used within the Oil and Gas and Aerospace industries.

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